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A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

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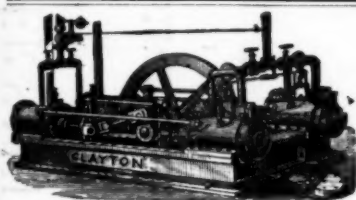
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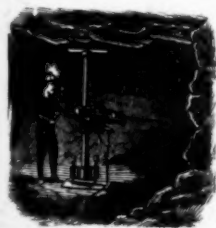
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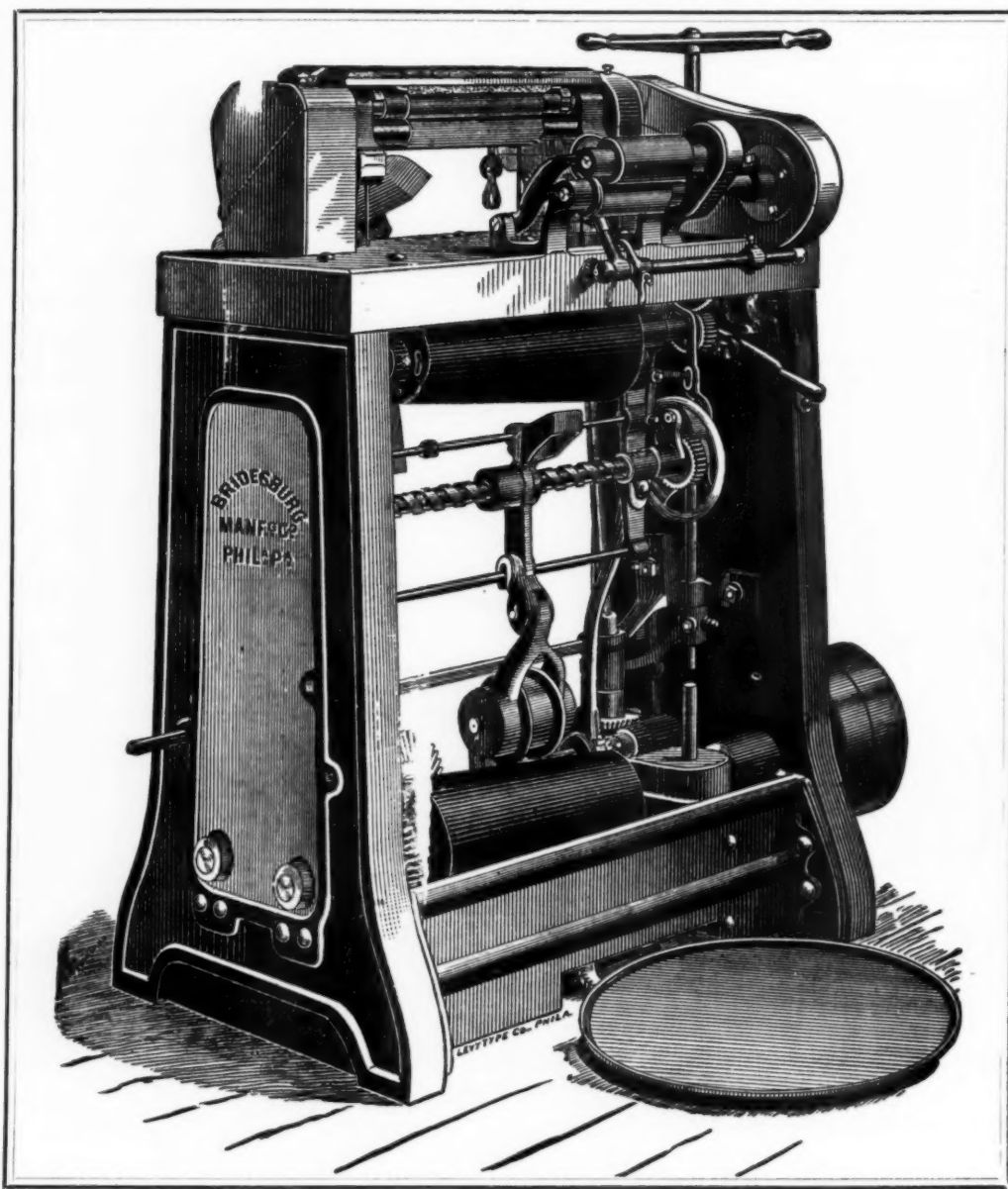
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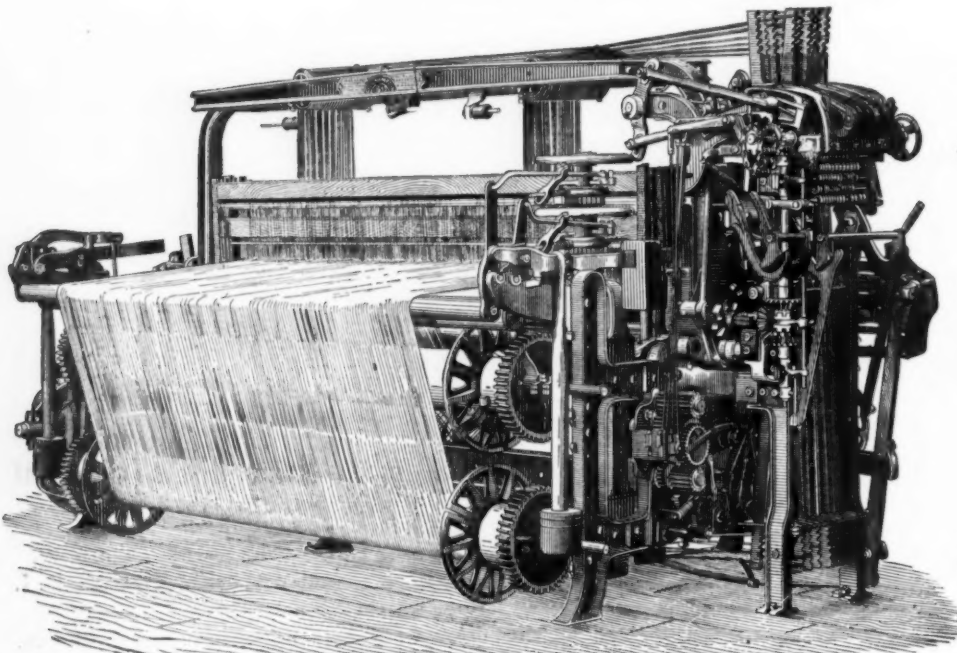
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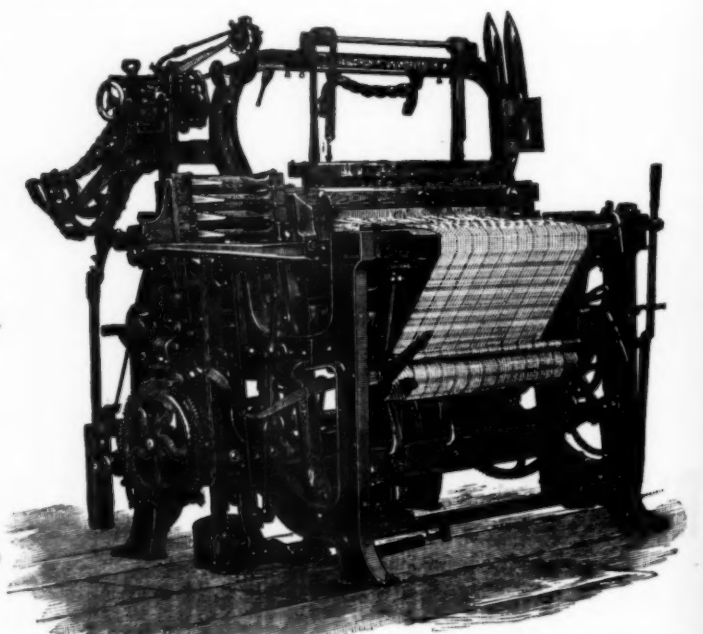
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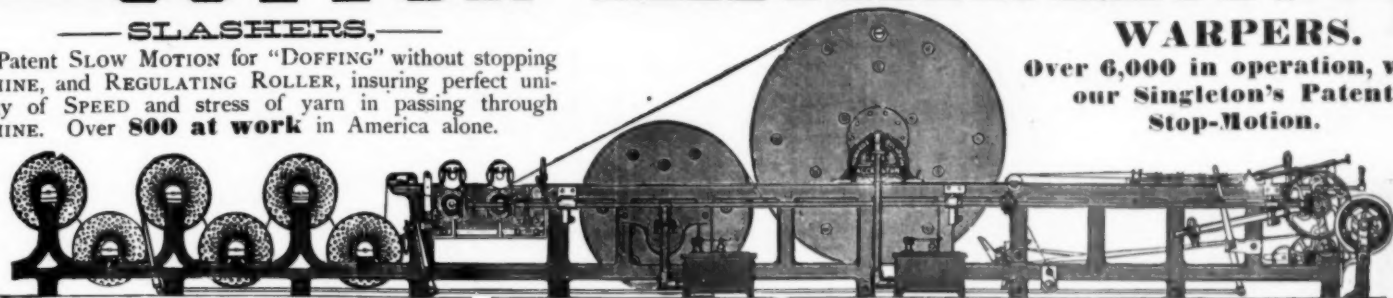
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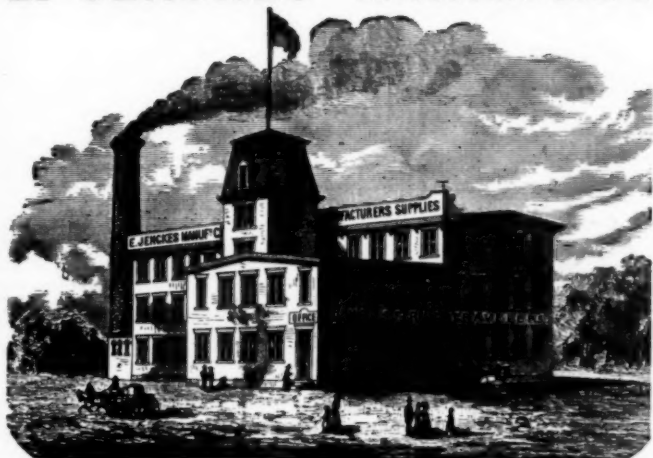
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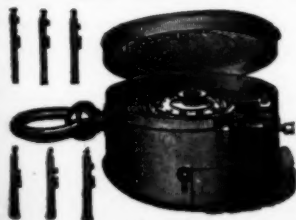
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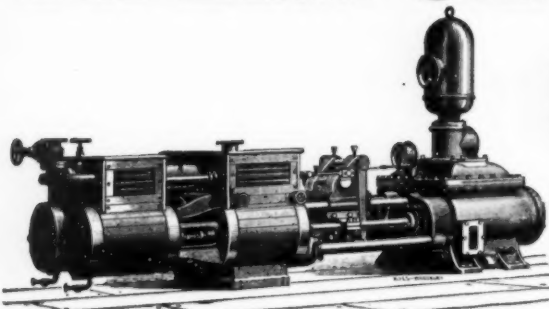
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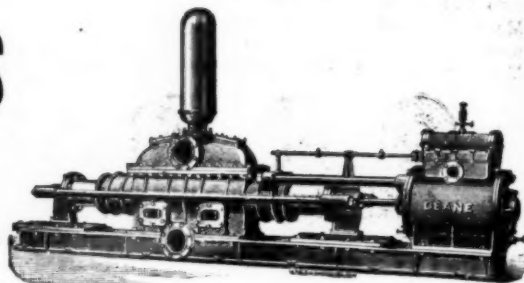
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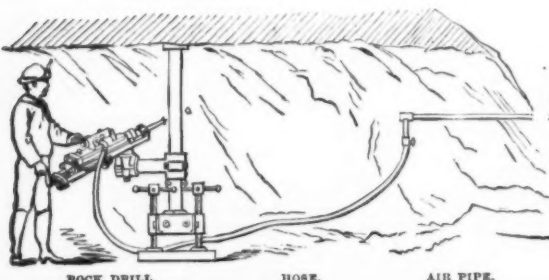
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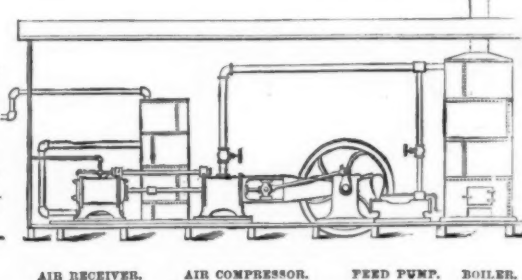
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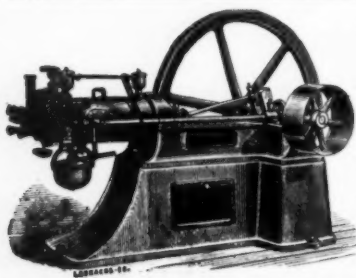
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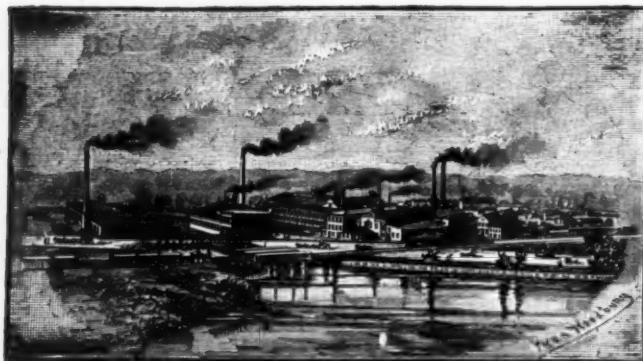
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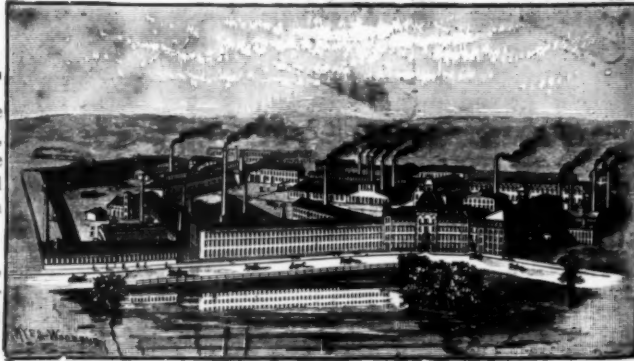
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WM. H. EDMONDS, Associate Editor.NEW ENGLAND BRANCH OFFICE:
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BALTIMORE, JULY 12, 1884.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

SELMA, ALA., has raised nearly \$50,000 for building a bridge that has long been needed. It will open up to the trade of that city an important section of country, and the increased trade thus developed will prove of great advantage to this enterprising city. Selma has wisely determined not to wait for outsiders to come in and develop her trade, but to go ahead and do the work through her own people, and thus attract men and money from elsewhere by her enterprise.

Our readers will confer a favor upon our advertisers and upon us, as well as benefit themselves, if, whenever they write to anyone advertising in this paper, if it is only for a catalogue, they mention that "your advertisement was seen in the BALTIMORE MANUFACTURERS' RECORD." A careful compliance with this request will be much appreciated.

Six Months' Progress of the South.

Nearly \$75,000,000 in New Enterprises.

The industrial progress of the South during the first half of 1884 is simply marvellous, and when we take into consideration the general depression in all branches of trade that has now lasted for several years, and the unfavorable financial position of Southern agricultural interests, on account of very short crops last year and the consequent injury to all other lines of business, the record of the past six months seems still more wonderful. During the two months just ended, May and June, the activity in industrial matters at the South was not, of course, as great as in the early part of the year, because of the usual summer dullness, which begins at the South somewhat sooner than at the North. Hence our statistics for those months show an aggregate of but \$13,744,000 as the amount invested during that time in new enterprises and in the enlargement of those already established. Adding this amount to what has been previously reported, gives a total of over \$69,000,000. On May 10 we published the figures for the first four months of the year, and summing up the total investments by States from January 1 to April 30 we had:

Kentucky.....	\$11,920,000
Alabama.....	11,182,000
Virginia.....	9,385,000
Texas.....	6,077,000
Tennessee.....	3,864,000
Georgia.....	2,834,000
Maryland.....	2,514,000
North Carolina.....	2,188,000
West Virginia.....	1,701,000
Florida.....	1,495,000
South Carolina.....	1,159,000
Louisiana.....	1,030,000
Arkansas.....	567,000
Mississippi.....	557,000
Total.....	\$55,501,000

At that time Kentucky headed the list with \$11,920,000, followed closely by Alabama with \$11,182,000; then came Virginia and Texas, and so on down. For the six months ended June 30 the list stands:

Alabama.....	\$13,840,000
Kentucky.....	13,491,000
Virginia.....	11,920,000
Texas.....	7,334,000
Tennessee.....	4,849,000
Georgia.....	3,759,000
Maryland.....	2,832,000
North Carolina.....	2,628,000
West Virginia.....	2,428,000
Louisiana.....	1,830,000
South Carolina.....	1,529,000
Florida.....	1,506,000
Arkansas.....	793,000
Mississippi.....	767,000
Total.....	\$69,221,000

In this list Alabama leads, having gone somewhat ahead of Kentucky.

These figures, to a limited extent, include the capital stock of all new enterprises, and some may say that the capital stock of a company does not represent its actual cash capital. We grant that this is true, but the decrease that would be made in this way would be counterbalanced by the full amount expended for new machinery, repairs, &c., (some of which are never reported,) if it were possible to obtain every item of this kind.

The list of new enterprises established in the South during the last six months shows a wide range of industries, and embraces cotton mills, woolen mills, flour mills, saw and

planing mills, iron furnaces, agricultural implement factories, machine shops, foundries, cotton-seed-oil mills, fertilizer factories, tobacco factories, ship-building yards, paper mills, and many others, besides coal, iron ore, copper, gold, mica, and other mining enterprises.

During the next few weeks we may expect to see only a moderate degree of activity in the organization of new industries, on account of the summer dullness in trade generally, but the outlook for the latter part of the year is now remarkably promising for the South. With one of the largest, if not the largest, wheat crops ever gathered, with fine yields of vegetables, fruits, &c., and with good prospects for a heavy yield of corn and a moderately liberal cotton crop, there is every reason for anticipating a more rapid industrial development of the Southern States during the next six months than we have yet seen.

MR. B. M. TURNER, of Johnstonville, Ga., writing to the Monroe Advertiser, Forsyth, Ga., very pointedly shows the disadvantages under which the Southern farmers labor in having no good home market for all their products, except for the leading crops, like cotton, corn, &c.; but he points out no way of escape from this trouble. He says: "It is sheer folly for a people to manufacture an article for which there is no demand, no matter how desirable the article may be in itself or how cheaply it may be produced. And no matter how badly an editor or other man may want a half pound of butter when company unexpectedly drops in to tea, it does not and cannot prove that there can ever be a steady or paying demand for food supplies where seventy-two out every one hundred of the population are engaged in agricultural pursuits; and the man who puts his money in it, except in rare and exceptionally favored circumstances and situations, is not likely to ever see it again."

New there is only one way in which this condition of affairs can be improved, and that we have repeatedly pointed out—the building up of the manufacturing and mining interests of the South. A good home market for their poultry, their dairy products, trucking, &c., would at once revolutionize the farming interests of the Southern States. Instead of giving all of his time and attention to cotton, the Southern farmer, in connection with his family, would give more attention to making good butter—and there is no country in the world possessing superior advantages for this business; his poultry yard would become an object of interest and of much profit; vegetables and fruits would be more largely cultivated, and under these changed circumstances there would be a marked improvement in the financial position of Southern farmers. It is hardly overstating it to say that the greatest need of the South, independent of

any other effect that such a state of affairs would have, is the building up of a home market for farm products; for in this lies the hope of Southern farmers, and without it there can be no great improvement in their condition. When the time comes that a farmer at the South can always sell his truck, poultry, eggs, butter, &c., at fair prices, the redemption of Southern farmers from the all-cotton and all-debt curse will be at hand. We know personally of one of the fairest sections of the whole South—a part of the great valley of Virginia, a land of vast resources, where, up to the building of the Shenandoah Valley Road, two years ago, and the consequent opening up of new markets and the building up of extensive industrial interests, the farmer could only get 5 cents a dozen for his eggs and about 10 cents a pound for butter that could not be surpassed. And in many portions of the South the prices for such things are equally as low, and that, too, when they are traded off at country stores for goods on which heavy profits are made. Immigration of agriculturists to the South is not so much needed as immigration of other kinds of laborers, for the former would merely increase the production without making any corresponding increase in the consumption of foodstuffs. It is not food producers, but food consumers, for which the South is suffering. How shall they be secured? is the great question, of more vital importance to everyone interested in the welfare of the South than all the fondly cherished political prejudices of the past against a protective tariff. Build up all over the South such hives of human industry as Roanoke, Birmingham, Anniston, Atlanta, and dozens of other such places, and scatter all over that fair land great and small manufacturing enterprises, and the important work will be accomplished. Then, and not until then, there will be a home market for all the products of the farm. Already we see the beginning of this mighty change, and if the people of the South will only consent to use the same means for building up their section that has wrought such wonders for the North and West—a judicious protective tariff—they will in a few years find their land the richest under the sun.

A FAVORITE argument of the advocates of free trade is that agricultural interests suffer from protection. That claim is well answered, as follows, by an Indiana farmer:

"The free traders have proven that the manufactories exist by virtue of the protective tariff. There are 700 people employed in them in this county. Last year I sold over \$300 worth of butter, milk, eggs, potatoes, and general farm truck to these factory people, while the tariff tax which I paid did not amount to \$10. Protection not only withdraws these 700 people from competition with me and other farmers, but makes them consumers of our surplus productions."

Wiswell's Improved Ore Crusher and Amalgamator.

There are but few more important industries than mining for the precious metals in this country to-day; and notwithstanding the vast sums of money sunk in unprofitable ventures in this direction, this industry yields abundant returns upon the capital invested where practical business skill and methods control its operations. In the exercise of such skill much depends upon the selection of machinery best adapted for the economical operation of the varied processes involved—from the extraction of the crude ore from its hidden recesses in the earth to the final production of its valuable metals.

Among these various processes none are of greater importance than the reduction of the crude ore to the necessary condition of fineness and the final separation of the valuable metal from the worthless mass in which it is embedded; for this purpose the Wiswell Improved Ore Crusher and Amalgamator combined is now offered to the mining world, claimed to be a "machine constructed on simple and strictly scientific principles, and capable of doing more and better work in these important respects than any other machine ever before introduced."

Mr. Jacob C. Wiswell, the inventor and patentee of this mill, has spent thirty-three years in the mining business as a successful manager and superintendent of mines in the West and South, and has made himself perfectly familiar with all the various machines for crushing and pulverizing ore which have thus far proved of any practical value; the stamping battery, the Cornish rolls, the Chilian mill and the Mexican arasta, have all been worked by him, and their excellencies and deficiencies noted with the eye of a practical expert, both in regard to their effect upon the ores worked and the economy of their operation.

In the mill now introduced under his name is combined the results of his years of patient study and practical experience; and he believes that "while retaining all the valuable qualities of the best known mills, most, if not all, of their objectionable points have been eliminated, and many new and valuable improvements have been introduced."

To enter fully into details showing all the points of superiority claimed for this mill, would involve a detailed estimate of cost in operating the various crushing, concentrating and amalgamating processes as at present worked, which would be out of place here; but the main essential points are so obvious that they may be briefly enumerated as they appear in the claims of the manufacturers of this machine.

First, as to cost of plant. A stamp battery, which is the accepted standard for crushing work, cannot be set up in any mining region easily reached, at a less cost than \$500 per stamp, or \$10,000 for a twenty-stamp mill (without power.) A Wiswell mill, of sufficient capacity to perform the same amount of work, can be set up ready for running for \$3,000 or less—a saving of over two-thirds of first cost—and this may be taken as a fair average saving in cost over any other mill of same daily working capacity.

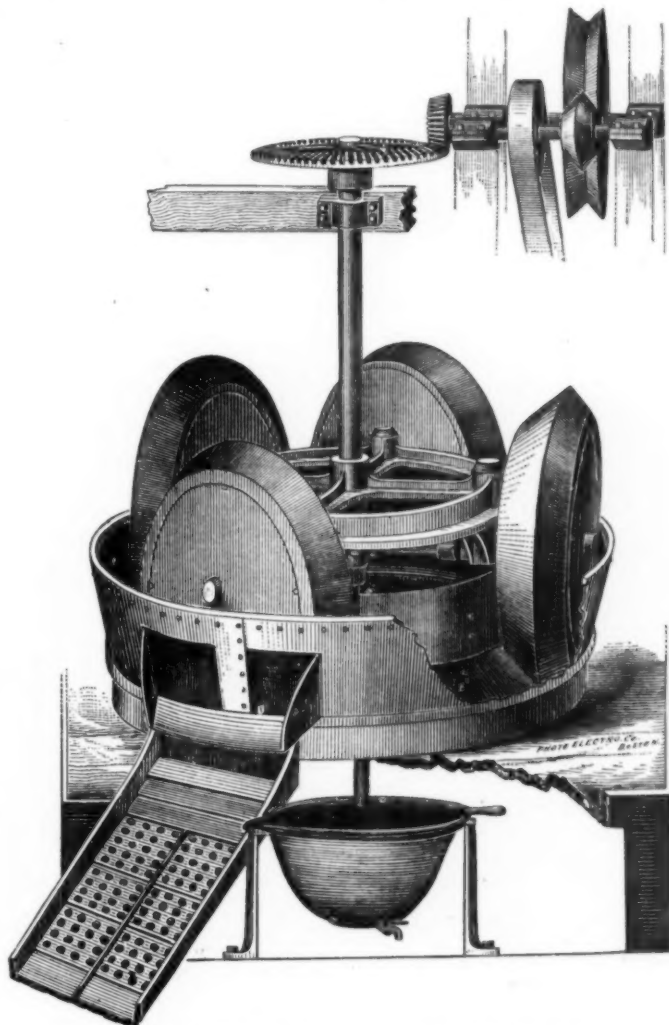
Secondly, as to cost of running. A twenty stamp battery requires twenty horse-power for running. The Wiswell mill will do at least the same daily amount of work, with less than ten horse-power, giving a saving of 50% in first cost of motive power and running expense.

Thirdly, as to wear and tear. In this respect the Wiswell Mill can safely claim a very decided superiority over any other known device for crushing hard or vitreous ores, as will be easily demonstrated by

a comparison of its working with that of the stamping battery. A single stamp having a lift of nine inches, and weighing 800 pounds, exerts a crushing force of 2,400 pounds at each stroke; thus a set of five stamps, covering a surface of 320 square inches, running at a speed of 40 strokes per minute, exerts a crushing power of 2,400 pounds per inch, over an area of 12,800 square inches per minute. In the Wiswell Mill each roll is 42 inches in diameter by 18 inches width of face, with a weight of 2,400 pounds, and covers 2,268 square inches at each revolution; thus, in its forty revolutions per minute, exerting a crushing power of 2,400 pounds over 90,720 square inches, or more than seven times as much as the five stamps, making the crushing capacity of the four rolls of this mill more than seven times as much as that of a twenty-stamp battery. The battery, as is well known, would require the complete renewal of its shoes and dies,

hard amalgam process of the stamp battery is both expensive and wasteful, as is also the soft amalgam process by the many methods where the pulp has to be taken from the crushing mill to be treated, none of which can be worked at a cost less than from \$3 to \$3.50 per ton of ore handled; while in this mill, by a simple, beautiful and inexpensive method, a most perfect amalgamation, without neutralizing or flouring the mercury, is effected at a cost not exceeding 50 cents per ton. As an amalgamating mill no mining company working free milling ores can afford to be without it.

From the data above given it will be seen that in the important points of original cost, capacity for effectual work, and economy in running, this mill has no equal, and when it is considered that all classes and conditions of ore, from the hardest and most refractory sulphurets to the soft, clayey and gravel placers, and the black



WISWELL'S IMPROVED ORE CRUSHER AND AMALGAMATOR.

at a cost of \$100 for every 300 tons of hard ore worked, making a constant expense of thirty-five cents per ton for every ton of such ore crushed, while, owing to the form of construction and manner of exerting its crushing power, by a continuous roll instead of repeated blows, the Wiswell Mill would show but little perceptible wear after crushing that quantity of ore.

Fourth, as an Amalgamator. It is in this respect that the proprietors of this mill feel the greatest confidence in its value to the mining community. Every practical miner knows that aside from the daily expense in running, any method which will save one pennyweight more gold per ton of ore than any other, cannot fail to commend itself,—as mining, as much or more than any other business, depends for success upon the use of the very best machinery and the greatest economy in methods. Every miner familiar with the working of gold ores knows that on amalgamation depends success, and that the

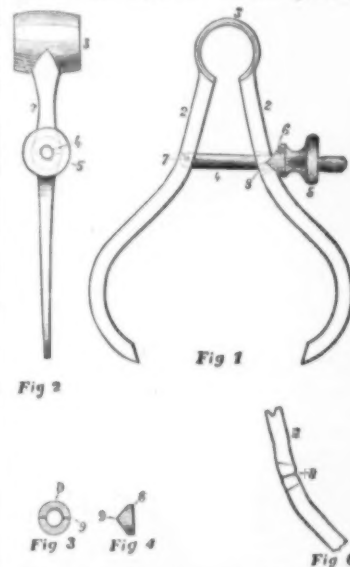
sands of the Pacific coast, can readily be worked in it, making clean work of the whole product of the mine, it will be seen that its value to the mining community has not been over estimated." Parties interested in mining are invited to visit the works of Messrs. Bisbee & Endicott, Chelsea, Mass., where the mill is exhibited in actual operation, Tuesday and Thursday afternoons, or to call at the office of the company, No. 4 P. O. Square, Room 16, Boston, Mass., where full information will be cheerfully furnished.

Not the least important of the objects of interest in Cincinnati is the Palace Hotel, which is an imposing structure eight stories high, fronting on three streets. All the floors are reached by elevators, the office and dining-room are lighted by electricity, and it is provided with all the modern aids to comfort and convenience. The rooms are newly papered, and it is elegantly furnished throughout.

Improved Calipers.

In spring calipers or dividers, as ordinarily constructed, the different angle of the legs, as they are opened or closed, is constantly changing the bearing of the nut on the leg, or on the plain washer placed underneath it. As a consequence the nut wears uneven on its face, wears uneven on the thread, and is not evenly and easily adjusted for size. The object of the invention shown in the engravings is to overcome this difficulty. Figs. 1 and 2 represent its application to a pair of spring calipers, and Figs. 3, 4 and 6 detached views of the parts.

It will be seen that in connection with the screw, pivoted in one leg of the caliper, and passing through the enlarged hole in the other, a washer, 6, having one flat side upon which the nut rests, and a knife edge, which rests in a corresponding



groove, 8, Fig. 6, across one of the legs, is used. It will be readily understood that in opening or closing the legs the washer will tilt on the knife edge bearing on the leg in such a way that the face of the nut and the flat face of the washer will always be fair, one with the other, and that the nut will consequently turn smoothly and evenly in whatever position the legs may be.

By using a knurled nut with this washer it enables the operator to adjust the caliper with one hand.

This improvement, as shown in the illustration, has been patented and applies to both calipers and dividers. Illustrated catalogue will be sent upon application to the manufacturers, J. Stevens & Co., P. O. box 104 Chicopee Falls, Mass.

NEW PUBLICATIONS.

The Passenger Department of the Chesapeake & Ohio Railway has issued a very handsome little pamphlet called "Blazings," marking out "a route for tourists, pleasure seekers and searchers for health." It is devoted to a description of some of the attractive features of the country traversed by the C. & O., and is illustrated with engravings of the magnificent scenery along the line of that road. Those who have not yet decided upon a summer trip should get a copy and read it. It will be sent from the office at Richmond.

MESSRS. FAIRBANKS, MORSE & Co., of Chicago, have contracted with the Westinghouse Machine Company, of Pittsburgh, Pa., to control the entire sale of the Westinghouse automatic engine in the Western States and the territories for a term of years. This contract, which is exclusive, takes effect July 1st, and, being closed only after a thorough investigation of relative merit, becomes a very practical endorsement of the engine in question.

CONSTRUCTION DEPARTMENT.

We publish, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

The Siemens Regenerative Gas-Lamp Company of Baltimore has been incorporated, with capital stock of \$50,000.

E. S. Wiley, and others, of Valdosta, Ga., will build an \$8,000 or \$10,000 school-house.

Wm. Aiken and Samuel H. Lighton, of Louisville, have purchased land from the Elyton Land Co., Birmingham, Ala., on which to erect a large foundry and machine shop.

The Talbot County Paper Mills, Easton, Md., are putting in a new 100-horse-power boiler.

Mr. — Hudson, Tuscumbia, Ala., will put up planing mill near there at the new town of Sheffield. Has purchased part of machinery.

J. W. Vetter & Co., Chattanooga, Tenn., are erecting an ice factory.

W. Ahrenbeck & Bro., of Hempstead, Texas, are building a large gin at Brenham, Texas, besides enlarging the cottonseed-oil mill at the latter place, which they lately purchased, as previously reported.

There is talk of establishing a machine shop at Level, Harford county, Md. D. B. Arthur can give particulars.

W. W. Wright, Dover Mines, Va., will build a large mill.

It is reported that the shops to be built at Meridian, Miss., by the Erlanger Railroad Syndicate, previously mentioned, will cost \$1,000,000, though this is probably too high a figure.

The Suffolk Lumber Co., Suffolk, Va., are enlarging their mills and erecting very extensive drying kilns.

Lombard Ayres & Co., New York, contemplate erecting a stove factory in Alabama.

The Alabama & Cincinnati Railroad, to run from Anniston to Attalla, via Gadsden, has been chartered.

F. H. Pomeroy & Co., of Gadsden, Ala., are getting in the machinery for their new broom-handle factory.

The steel works company at Cumberland, Md., previously reported, has been incorporated as the Crown & Steel Company.

A \$100,000 pork-packing house is talked of for Chattanooga, Tenn.

\$60,000 is to be expended on the Dallas, Tex., water-works.

The Natchez Cotton Mills, Natchez, Miss., will add some new machinery.

A palmetto factory is to be started at Sanford, Fla.

A large flour mill is being erected at Campbellsville, Ky.

Contracts will soon be given out for building the Trenton Cotton Factory, Trenton, Tenn., previously mentioned.

The mill and cotton gin of J. L. Johnson, in Middle Creek Township, N. C., were washed away by the storm; loss \$3,000.

The McCullough Iron Works, Rowlandville, Md., lately destroyed as reported, will be rebuilt at once.

Liddell & Co., Charlotte, N. C., are pushing work on their extensive foundry and machine shops, which will be the largest in the State.

Negotiations are pending for erecting water-works in Abilene, Tex.

The Georgetown (Tex.) water-works will, it is said, cost over \$50,000.

The Tunis Gang Flooring Machine Co., stock \$500,000, has been incorporated in Baltimore by E. L. Tunis, H. C. Tunis, E. B. Hunting, David Wilson, Wm. J. Brown and others, to manufacture planing mill machinery.

East Macon, Ga., is to have a grist and planing mill.

H. C. Jackson will build the Methodist Episcopal church's new house at Chattanooga, Tenn.; cost \$30,000.

The Eureka Cotton, Gin and Corn Mill Manufacturing Co., capital \$30,000, has been incorporated in Palestine, Texas, by T. B. Greenwood, P. W. Ezall, James Ozment and others.

The Nashville Cotton Mills, Nashville, Tenn., are putting in their new machinery, previously reported as having been contracted for.

The Columbus Ice and Refrigerating Co., of Columbus, Ga., previously mentioned, have purchased the ground for their buildings, and will build at once.

Messrs. Freeman & Sons have purchased coal land at Pocahontas, Va., and will engage in mining and coke-making.

The McCullough Iron Co. are erecting extensive charcoal works at Northeast, Maryland, to cost \$50,000.

Machinery is being received for the new Erlanger Syndicate's railroad shops at Meridian, Miss., previously mentioned.

Abingdon, Va., has voted to build water works.

The Willow Brook Manf. Co., High Point, N. C., will rebuild their cotton mill, reported in this issue as burned, at once.

D. C. Bacon & Co., of Savannah, Ga., have purchased the ground for their extensive sash, door and blind factory and planing mill. They will commence building very soon.

BURNED.

Carriage factory of Goldin & Atzrodt, Harrisonburg, Va.

The dye house of the Bibb Manufacturing Co., Macon, Ga.

Manfield's Mattress Factory, Fort Worth, Texas.

The cotton mill of the Willow Brook Manf. Co., High Point, N. C., was burned July 4; loss about \$75,000. Will rebuild at once.

Planing mill of Hamilton & Son, Paris, Texas; loss, \$20,000.

THE Chronicle, of Clarksville, Tenn., says: "The growth of protection sentiment in Tennessee, which has come with the spirit of factory building and general progress, is simply marvelous. In twenty years, when there will be a furnace wherever there is an ore bank in this State, and every hamlet shall have some kind of manufacturing enterprise, the free-trader will be as lone-some in Tennessee as he is now in Pennsylvania."

LOCKWOOD, GREENE & CO. MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

The Woolen Manufacture.

Its Prospects and Possibilities.

[For the Baltimore Manufacturers' Record.]

We live in an age of astounding progress. In no country in the world has development advanced with such rapid strides as in this! Every day fresh fields of enterprise are opened up, and the immense stream of immigration passes onwards to become possessed of the rich treasures long waiting to be gathered. The regions of early settlement have amassed wealth by an intermittent, it may be, but still on the whole marvelous rapidity. The country has yet ample resources for the many millions who are coming. The population of a large town steps on these shores every week, (some 10,000 persons) together with the natural increase of population, excess of births over deaths, is creating a constant increased demand for all the products of the country. Strange that in the face of such facts there should be such a thing as depression of trade. Yet such is the case, and ever must be, because there is no law and can be none that shall regulate the supply to the exact demand proportionately. Combinations may for a time succeed in controlling such, but in the end they must go. The producer, however, may console himself that the excess of supply now is, provided other competitors are not started up (which in depressed times are unlikely,) only the necessary supply of a short time hence, and a deficiency of supply in the near future.

The woolen manufacture is at the present time seriously depressed. There are few industries that have had such a rapid development. Exceptional advantages have fostered its growth, and the wave of prosperity has rolled onwards, both deep and strong. There can be no doubt but that there will be a recovery and further progress ere long, and with the rapidly increasing wealth will come an increased demand for the finer grades of goods. At present these finer grades are largely imported from the European countries; whether the future increased demand shall be supplied by an increased importation, or whether an advance shall be made here to meet it is not easy of solution.

The manufacture of fine woolsens, whether in the popular style of worsteds, (men's wear) or woolsens, requires a high order of skill and long experience. There are some manufacturers of such in this country who have devoted long years of patient labor to its production, and are now reaping the reward of their patient and far-seeing endeavor, but their number is very small. The average manufacturer believes rather in "rushing through his goods" to the exercise of painstaking so absolutely essential to good work. It is to this, and to this alone, that the excellence of French and English goods may be attributed. They have a more suitable wool to start with, free of duty, and they make the most of it.

What is done abroad may be done here under similarly favorable circumstances, but at present such do not exist. If in the South wools can be grown of equal merit to the best German and Sydney for clothing purposes, and the Port Philip or Melbourne wools for combing, much will have been done to make this country independent of foreign wools. Until then the foreign wool will be had, whatever the cost, so long as a fastidious and exacting market will pay the price for the best article. So soon as manufacturers can secure the best skill and a sufficiency of well-trained help, just as soon will they find the advantage of an enlightened policy.

Some who assay to lead public opinion assure us there is not a large excess of goods in the dealers' or manufacturers' hands generally, but that the plethora is in the middle or lower grades—certainly the safest class to be in excess, if there must be an excess. There can be no doubt whatever that there has been an immense output of goods of these grades, steadily increasing for years past, at a faster rate than the demand would justify. Although there have been fewer mills, yet machinery and increased facilities have largely increased production.

The general aim of manufacturers has been to increase their output to the greatest extent possible, so as to reduce the rate of working expenses on the whole. The result of this has been to largely increase the volume, and somewhat to the depreciation of excellence.

Beyond the possibility of question the high tariff has proved such an enormous subsidy on the manufacture of woolsens that the vital principles of commercial success, viz: thorough acquaintance with the business, have been almost entirely overlooked in the rush to form corporations and run big mills. For a time it answered well, and profits were easily made ranging from 15 to 40% per annum. With such a stimulus as this, no wonder at an inflation of the manufacturing industry. Had this been based upon the first principles of manufacturing experience there would not have occurred the serious losses that have of late disrupted many a wealthy concern, but those best acquainted with the real condition of the woolen manufacture as reflected in the leading houses in New York and Boston know too well the source of weakness of very many supposed prosperous corporations.

The necessities of the times demand a change of operations. Manufacturers must be more painstaking, employ more skill, practice greater economy, and sell their own product. There must be no middle men. Commission houses as a class must be dispensed with. The manufacturer cannot supply the consumer, i. e. the tailor; to do this he must become a merchant; neither can he afford the profit to a commission house. It is alleged by some that the true province of a manufacturer is to produce his goods, leaving the selling to others. If the producer had no sort of interest beyond that merely of preparing them for the market, it might be so; but so long as he has to secure the best dividend he can as the final result of his efforts for himself and others, it is unquestionably his duty as well as his interest to see that the all-important department of selling is conducted to the best possible advantage. When profits were large and sales well assured, the producer probably found it most to his advantage to devote his energies to getting his goods into the market, leaving to others the task of placing them. The demand was such they were tolerably sure to realize a profit, and if in some cases not so great as might otherwise have been, yet he was on the whole satisfied, and was glad to be without further trouble. As prices became cut to the lowest point, and too often are found to be on the losing side, with goods glutting the market, there is no longer the margin of profit to cover the heavy commission and claims of middle men, neither can he afford to receive from such the very doubtful support afforded. That these houses have large connections and considerable means of selling there can be no doubt; but they have not greater facilities for sale than any enterprising capable manufacturer in the course of a reasonable time may acquire.

There are drawbacks to the commission house of a very serious character. In times of depression, when the manufacturer is in a measure in their hands, they too frequently push the sales of the wealthiest and most powerful corporations, from fear of losing them, to the detriment of the weaker who are in the greatest need.—Then resort has often to be had either to *forced sales* at heavy loss or advances made upon commitments at two-thirds value. The settlements of which soon lead to ruin! This is but an old story. The bitter lessons have been learnt over and over again by many an aching and well-nigh broken heart, and its record written almost in tears of blood!

The interests of the commission house are not so identical with those of the manufacturer as they should be. The latter wish sales at the highest prices possible, and would pitch the prices at a higher level than can be *easily* obtained. The commission house, while *wishing* to get good prices, yet are interested to get them at such that will command an *easy* sale. In vain the producer protests. The weapon used for such refractory subjects is, *delay*. They don't sell. He has redress in changing to another commission house, but the remedy is to him a costly and very inconvenient one. As a rule he will exercise a great deal of forbearance before availing himself of it.

The larger and wealthier corporations have the first attention. As the manufacturer is always better able to sell his own goods than anyone else is to sell them for him, those who have small mills may find it to their advantage to call at least occasionally on their principal customers.—They gather ideas and promote business. When a large mill is run the selling is simply as another department, with, it may be, an office in New York or Boston for a resident salesman or drummer with samples, or it may be a *small* assorted stock. Other drummers may scour the large cities as occasion may require. By this arrangement the manufacturer is brought into direct contact with the merchant who distributes his goods, and a confidence is being established according to the integrity and ability with which it is sought. In times of depression he still may have to make *some* concessions, but both *he* and his customer know there is no third party stepping in to divide the spoils, and he has the satisfaction of having a *fair share* of what trade there is going.

For the most profitable and successful development of woolen manufacturing, big corporations are undesirable. During late years there has been a growing desire for new and startling designs, until it may almost be said that taste has run riot! The market, avowedly exacting, has been marked rather by capriciousness than being merely fastidious. An exacting and fastidious market tends to greater excellence of production; but caprice is deeply injurious. New styles are no sooner fairly introduced and begun to be made to advantage, than they have to be thrown aside in favor of something probably foreign to them in character and design. This not only entails much greater cost upon the producer, but is in a measure inimical to the best results. That this is a great evil, most persons are agreed; to find a remedy is by no means easy. Taste has not yet settled down into the definite lines usually observed in older and more conservative countries; and until such is the case (if it ever will be) a vigorous effort must be made to anticipate these varied styles as they recur. Greater facilities than are usually found to exist are much needed. The uniformity of machinery and appliances so desirable on a steady-going staple trade are out of place here; and while a varied plant may entail more trouble and watchfulness to keep in steady work on the part of the management, yet that such

may be made to conduce to a better result in a variable product, is *indispensable*.

The *very large* mills which during the more profitable times were started up, are not adapted for this constant change; they require a large *staple* demand as a backbone, and then are but indifferently prepared to cater for the novelties required. They are too unwieldy to be *well* managed. In support of this, we have only to acquaint ourselves with the *facts* as recorded in our leading mercantile journals from time to time.

Small mills are also ill-adapted to present requirements. They are scarcely able to afford the skilled help in the various departments, or to produce the endless ranges of styles necessary for a leading position. In times of prolonged depression they can rarely command sufficient capital to tide them over.

The desideratum is undoubtedly what may be termed medium-sized mills, running, it may be, from 8 to 12 sets as private firms, or from 12 to 20 sets as small corporations, with ample capital. These are large enough to pay first-rate ability, and are not beyond the control of such.

With the rapid development of many industries in the South there is very naturally a desire on the part of the promoters to encourage *all* manufacturing industries as alike conducive to a general prosperity. That this is utterly fallacious may readily be seen, and practical men should not allow themselves to be induced to endeavor to start up an enterprise in a new locality without first seeing there is *not* wanting any element which may be reasonably required to insure success. Capitalists are often allured by the representations of well-meaning enthusiasts to embark in schemes for supplying a supposed want, because a populous neighborhood consumes a large amount of goods that have to be imported into that locality, whereas they *might* be produced there! It does not necessarily follow that, even should there be *some* local advantages favorable to the manufacture of such product, that as a *whole* the manufacture could be carried on to advantage. As a general rule, where the carriage or freightage of goods forms a considerable item of proportionate expense in the product, as in the case of most of the minerals, the advantage of manufacture of those goods near to their natural location usually overrides every other consideration, and the manufacture springs up and maintains its ground. Where *labor* forms a large percentage of cost, and carriage or freightage a small proportionate cost, then the locality of *cheap labor* is usually a sufficient advantage to override all other considerations in the production of such goods and bringing them to a profitable result. As an illustration of this the case of iron manufacture may be given. If, as is usual, iron ore and coal are found near together, no manufacturer of iron would have a chance of competing with such that had to pay a heavy freight for his coal from a distance.

On the other hand, the manufacture of silk depends for its successful manufacture upon its skillful and well-trained labor. The mere fact that *silk can be grown* in that locality, or that the consumers are near at hand, could have no palpable influence upon its cost of production. *Tariff* considerations may induce successful operation, but the rate must be *heavy* to override labor!

Woolen mills are being started up in the South, and there exists a desire on the part of the residents in some districts to increase the value of their town by adding the manufacture of cotton or woolen, and they generously offer to support liberally any enterprising capitalist who will come there to start such industry. They hold, as special inducements, that there is ample water of the best kind, good wool in large quantity (also cotton) grown near by, and timber plentiful for building purposes and

fuel. These are good, so far as they go, but as in cotton and woolen manufacturing *labor* forms such an important part of the cost, capable labor must either be found there in sufficient amount for the undertaking or attracted thither from other parts, and be able to live in greater economy or comfort, or else more wages will have to be paid as an attraction, which would probably more than counterbalance the other advantages of locality. If the wool grown in that district is found to be suitable for the production of such goods as are in demand in those parts, the double carriage of both raw material and finished product is saved, and which together may form a fair percentage of profit. If, in addition to this, cheaper labor can be found, a very important item is added; but if, while the wool or cotton is found suitable for manufacturing there, the finished product has to be sent away for sale to the neighborhood of other cotton or woolen manufacturers, there has not been much saving in the way of freight, as the difference between the freight of the raw material and the finished product would be of no practical value.

Undoubtedly the tendency of the times not only in this country, but throughout the world, is to an increased competition in every department of labor. With the advance of education and the discoveries of science there must necessarily be a more intelligent grasp of our industrial pursuits. The triumphs of to-day are but the common-places of to-morrow in the great race for pre-eminence. In view of this, great prudence and circumspection is needed in all manufacturing pursuits. The time has probably gone by forever when enormous profits, such as were made during the late war and for some after, can be made in the textile industries. The only chance for good success lies with those who are *really capable*, have a mill and plant well suited to all the requirements of the times, can command a fair amount of capital, and work on an economical basis as any competitors.

Does the South possess a favorable field for such enterprises? She claims to have wool—the best grown in the country. If so, this is a point in her favor. That she has brooks and streams or rivers of good water in abundance there can be no question. In this she is in as favorable position as the North. Has she mills? No, but she can build them much more suited to present requirements than many of the ill-arranged, improvised mills of the North. In this she has practically no disadvantage. Has she labor? Echo answers, has she? (This can only be answered by those who know where to find them.) She has not skilled labor,—there is not *too much* of that in the North. There is a great deal there that passes current for such that if in European mills would not seriously menace the home manufacturer were the tariff taken entirely off! Skilled labor could be got from Europe in sufficient quantity to train the native help if the climate didn't kill them off before their work was done. Objection has been made to the use of colored labor in mills. It has been said that "if they are worse than the lower class of Irish that flock here, then they are to be pitied!" Perhaps they are!

Appearances greatly favor the opinion held by some that many of the large Northern mills have had their day. Several have been permanently closed, at least so far as the parties who have been interested in them are concerned; others are hesitating. One of the largest—if not the largest—has been for some time trying to re-form; with its shares gone back to one-sixth their par value, where they stood not long since, are now decided to submit to auction. The population of the rural districts is decreasing, and the tide of prosperity seems to be flowing to less developed States. Will the South step in? There is room for good-

sized mills with a capable staff able to produce the best class of goods for which there is and *must* be a steadily increasing demand. While the country increases in population and wealth, the class of consumers of a fine product increases in equal ratio. The Northern manufacturers have largely pursued the lower grades as more suited to their capabilities, and upon which they formerly made handsome profits, leaving the finer grades to be imported. They are getting to see the necessity for a change. Are they to have it to themselves? What have the rising cities of the South to say to that?

8.

The Cobden Club.

The recent Cobden Club dinner in London was an interesting event—for those who were present. The dinner is said to have cost \$20 per plate. Among the guests was a Dr. Smith, of Sioux City, Iowa, who was introduced by Lord Carlisle as "a recent illustrious American convert to the philosophy of Cobden, which had done so much for the commercial glory of England, and which, when adopted by the Americans, would remove the last bar to their commercial supremacy." And then the illustrious Dr. Smith, under the melting influence of his \$20 repast, delivered an interesting address "devoted to a description of the work being done in the United States by the revenue reformers and to the story of the progress of that work in changing and enlightening American public opinion."

The generous philanthropy of these English manufacturers is overpowering. If, under the beneficent influence of free trade, they are prospering and finding sale for their products in "the markets of the world," while the benighted Americans, by reason of the blighting effects of a protective tariff, are removed from competition with them, their unselfish efforts to induce American manufacturers to abolish the tariff and thus become their competitors, present an exhibition of kindness of heart that moves to tears. There is something about it, though, that suggests the story of the fox who was caught in a trap and escaped with the loss of his tail. The thought of living the rest of his days tailless, while all other foxes gloried in the possession of that appendage, became a source of grief and mortification to him, and he forthwith set out to persuade his companions to have their tails amputated. He expatiated on their uselessness and unsightliness, and by specious arguments sought to convince them that they were an encumbrance and a mar to beauty, and that only a tailless fox could be happy.

And some "illustrious" Americans, "revenue reformers," have been captured by the fox's logic and are going about clamoring for the abolition of tails.

☞ If you are not already a subscriber to the *Baltimore Manufacturers' Record*, send us \$3 and you will receive it regularly for one year or six months for \$1.50.

The Wealth of the Country.

Mr. Chas. S. Hill, of Washington, is writing a series of very interesting letters upon Political Economy for the New Orleans Times-Democrat. In letter No. 4 he says:

Wealth is the savings of labor—the accumulation of earnings over and above the consumption of necessities of life, or in waste.

"The pen is mightier than the sword," but wealth, the result of economy in industry, is mightier than the pen; the goal of life is wealth; the labor of body and of mind is wealth; the wise enactment of the statesman is wealth; the aim of the poor, the avarice of the rich, the satisfaction of that more contented and happy sphere of moderate means,—all, notwithstanding our gospel teachings, is to covet wealth. It is the duty of man to seek this reward of industry; it is the only result to a nation that will perpetuate its existence; hence we must naturally search through common observation into the conditions of older nations of the world in this respect, and particularly into our own, to find upon what system of economic principle the filiation of causes has influenced things beyond.

The accumulation of the world's wealth is as follows:

Year.	Country.	Wealth.	Wealth per capita.
1883.	United States.....	\$51,000,000,000	\$1,010
1883.	United Kingdom.....	44,000,000,000	1,880
1880.	France.....	40,000,000,000	1,100
1880.	Germany.....	35,000,000,000	550
1878.	Russia.....	25,000,000,000	200
1879.	Austria.....	14,000,000,000	280
1881.	Italy.....	8,000,000,000	320
1879.	Spain.....	7,500,000,000	440
	Asia (Japan, China, India, Persia, etc.)	60,000,000,000
	Africa.....	5,000,000,000
	Total.....	\$268,500,000,000

Year.	Country.	National taxation per capita.	National debt.
1883.	United States.....	\$ 7.43	\$1,875,000,000
1883.	United Kingdom.....	10.17	3,815,000,000
1880.	France.....	15.00	4,700,000,000
1880.	Germany.....	10.00	1,270,000,000
1878.	Russia.....	4.50	2,081,000,000
1879.	Austria.....	9.50	1,532,000,000
1880.	Italy.....	4.35	2,042,000,000
1879.	Spain.....	7.00	2,505,000,000

This was shown in a paper prepared for and read before the Metropolitan Industrial League in 1882, and then for the first time brought to public attention that the United States is now the wealthiest of all nations, it may be repeated with pride and great satisfaction, and in respect for the prudence and foresighted wisdom in political economy of our fathers, who gave us the blessings of freedom politically and protection economically.

It cannot, however, be expected or desired, in this advanced age of education and developed science of genius in reasoning individually—instead of accepting the dead economic literature of theoretical philosophers as a guide for living industry—that such a declaration will be satisfactory without full reason and evidence, and it is therefore proper to supplement the foregoing exhibit with the following, showing the progress of our country in wealth, the result of the industry of our people and the practical judgment of the statesmen who formed and guided our national policy, as will be found in chronological order under political economy of the United States in following letters:

Period.	Wealth.		Population.		Exc. in Inc. of Wealth.
	Amount.	Inc. %	People.	Inc. %	
1790..	\$ 750,000,000	3,929,827
1800..	1,072,000,000	43	5,308,557	35	+02
1810..	1,500,000,000	39	7,293,814	36	+08
1820..	1,882,000,000	25	9,298,191	27	+08
1830..	2,623,000,000	41	12,866,020	29	+07
1840..	3,764,000,000	43	17,069,453	32	+00
1850..	7,136,000,000	89	23,191,876	35	+53
1860..	16,159,000,000	126	31,443,321	35	+08
1870..	30,069,000,000	86	38,558,371	22	+64
1880..	51,000,000,000	70	50,155,783	30	+10

In this exhibit will be seen a development in wealth and population which is without parallel in the history of nations.

The present values of the various accumulations in our country, are, in detail, as follows:

Real estate—urban property, assessed value.....	\$12,000,000,000
Farms, assessed value.....	10,000,000,000
Manufactures, value product.....	6,000,000,000
Railroads, capital.....	5,500,000,000
Personal property—stock, improvements and implements, value.....	4,000,000,000
Mining, value.....	250,000,000
Shipping, value.....	155,000,000
Insurance—life, assets.....	420,000,000
Insurance—fire, assets.....	205,000,000
Canals, value.....	170,000,000
Petroleum, value.....	30,000,000
Forests, value.....	100,000,000
Telegraph, capital.....	100,000,000
Sundries—floating deposits, etc.....	2,000,000,000
Public property—buildings, navy yards, etc.....	5,000,000,000

Total wealth..... \$51,000,000,000

There cannot be a healthy condition of affairs to produce wealth for a nation unless there is also an adequate tariff, unless such a tariff is perpetual, of discretion and discrimination.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, July 9, 1884.

Business has been interrupted by two days of holiday, which materially reduced the volume of trade, but the general condition of the markets is perhaps a trifle better than at the date of our last issue. There is a very widespread opinion that the fall trade will be moderately good, despite the excitement of a presidential election.

In the manufactured iron market business continues quiet and rather depressed, with prices weak and shaded to induce sales. We quote, viz:

Ref. Bar Iron, 1 to 6x 1/2 to 1.....	1.90 @ 2 c
" " 1 to 4 1/2 x 1 1/2 to 1.....	1.90 @ 2 c
" " 3/4 to 2, round and.....	1.90 @ 2 c
square.....	2.80 @ 3 c
Hoop Iron, 1 1/2 wide and upward.....	2 1/2 @ 2.60
Band Iron, from 1 1/2 to 6 in. wide.....	3.20 @ 3.30
Horsehoe Iron.....	5 @ 5 1/2 c
Norway Nail Rods.....	10 @ 11 c
Black Diamond Cast Steel.....	4 1/2 @ 4 3/4 c
Machinery Steel.....	3 1/2 @ 4 c
Spring Steel.....	10 @ 11 c
Common Horse Nails.....	2.50 @ 2.60
Railroad Spikes, 5 1/2 x 9-16.....	2.50 @ 2.60

The demand for pig iron is but moderate as last reported, and prices unchanged, viz:

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	\$28 00 @ 29 00
Virginia C. B. Charcoal Wheel Iron.....	28 00 @ —
Anthracite, No. 1.....	21 00 @ 23 00
" " 2.....	20 00 @ 21 00
" " 3.....	18 00 @ 20 00
" " Mottled and White.....	16 00 @ 17 00

Philadelphia Iron Market.

PHILADELPHIA, July 7, 1884.

The volume of business transacted in iron and steel since Monday last has been unusually light, but there is no disappointment in trade circles, as business is never expected at this season. The bar mills are taking stock and repairing, and stocks of refined iron are lighter than they have been at any time for months. There is no room for any further decline in prices, and no probability of any advance. Refined bars are quoted at 1.80 to 1.95; common, 1.65 to 1.80. A good many inquiries have been made, with a view to purchases after the middle of the month, but it is extremely improbable that the activity will have any effect on prices. Nails are nominally \$2.40 to \$2.50. A great deal of old material is offered in the market, but very few sales can be heard of. Steel rails are held at \$30 in large lots at mill, \$31 to \$32 in small lots, but, despite these very low quotations, no sales of any magnitude have been reported. Less than 1,200 miles of road have been built during the first half year. The rail capacity could supply rails enough for 5,000 miles. This fact accounts for the declining tendency. The chances for any improvement are exceedingly slim. Railroad builders must wait on the country, and the rail makers must take the consequences. One reduction of wages has gone into effect, and others are talked of. Old T rails are offered at \$19, with takers

for small lots at \$18 to \$18.50; double-heads and bridge rails and other kinds of old material are offered, but no takers are in sight. Nothing whatever has been done in pig iron for a week or two, outside of petty purchases to fill out orders in hand. Some furnace companies expect to secure orders some time this month for supplies to carry mill-owners into the fall. Stocks of foreign iron in New York are very light: tin plates, 17,661 boxes; pig iron, 3,264 tons; steel wire rods, 3,042 tons; pig lead, 1,045,341 pounds; old rails, 1,335 tons.

The talk in the trade here is that the demand for iron and steel and hardware for the rest of the year must necessarily be somewhat heavier than for the past six months. Consumers can rest assured that there is nothing to gain in any downward tendency in prices. A great deal of pig iron is selling at cost, and as to merchant iron and nails there is nothing in them at present prices except the preservation of trade until an improvement will bring better demand and moderate profit.

Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co.,
Pig Iron Commission.

CINCINNATI, July 7, 1884.

Such change as has been felt in the market since the last report is believed to be for the better. Orders continue about as scarce and prices as low, but there is less gloomy and discouraging talk about the future. A good many buyers have been holding purchases until after the fourth, awaiting a fuller development of money matters and crop prospects. The improvement in both these particulars is leading to large inquiries that it is thought will crystallize into business during the month. The weakness in prices that has been under the surface of the market for a month has finally carried nearly all quotations to a lower level, and we now name the following figures as fairly reflecting the market. The prices are for cash:

HOT-BLAST FOUNDRY.	
Hanging Rock C. C., No. 1.....	\$21 00 @ 23 00
" " 2.....	19 00 @ 21 00
Southern " " 1.....	19 50 @ 20 00
Strong Neutral Coke, " 1.....	17 75 @ 18 00
" " 2.....	16 50 @ 17 25
" " 3.....	16 00 @ 16 75
Soft Stone Coal, " 1.....	18 50 @ 19 25
" " 2.....	17 00 @ 17 75
FOURGE.	
Strong Neutral, No. 1 Mill.....	15 00 @ 15 50
Cold Short, " 1.....	14 50 @ 15 00
CAR WHEEL AND MALLEABLE.	
Hanging Rock C. C. B.....	30 00 @ 31 00
" " W. B.....	20 00 @ 24 00
Southern Car-Wheel Iron.....	24 50 @ 26 00
Lake Superior " ".....	23 00 @ 24 50
" " Malleable.....	24 50 @ 25 50

Specially reported by E. L. HARPER & Co.

CINCINNATI, July 7, 1884.

In view of the extraordinary stringency of the money market the past month, the general promptness of corporations and stock companies in paying their semi-annual interests and dividends has been unusually gratifying, and the manner in which merchants and manufacturers have met their obligations, notwithstanding the limited discount facilities afforded by the banks, has been agreeably surprising, and demonstrates beyond a peradventure the excellent condition of the country as regards its manufactures and commercial enterprises. The small number of failures in legitimate business revealing a substantiality that could not have been known or even reckoned upon in the absence of the ordeal. The crops continue to develop satisfactorily, and give promise of an extraordinary yield. The foundries and rolling mills are fairly busy and the demand for tank and plate iron warrant the producers in securing advanced prices over recent figures. The market for pig iron continues fairly active, the season considered, and the annexed figures represent prices current:

FOUNDRY.	
Hanging Rock Charcoal, No. 1.....	\$21 00 @ 23 50
" " 2.....	20 00 @ 21 50
Strong Neutral Coke, " 1.....	17 75 @ 18 25
" " 2.....	17 00 @ 17 50
American Scotch, " 1.....	18 00 @ 18 50
GREY FORGE.	
Neutral Coke.....	16 00 @ 16 50
Cold Short.....	15 50 @ 16 00
CAR WHEEL AND MALLEABLE.	
Hanging Rock, strictly cold blast.....	26 00 @ 26 75
" " warm.....	22 50 @ 23 00
Lake Superior Cha-coal, all grades.....	23 00 @ 24 50
Southern, Car Wheel, strictly cold blast.....	26 00 @ 26 50
Anheer Virginia Warm Blast.....	21 25 @ 21 75

Chattanooga Iron Market.

Specially reported by S. B. LOWE.

CHATTANOOGA, TENN., July 7, 1884.

It hardly seems possible to anticipate a duller future than we are now having in every branch of trade. The weather has turned airy and hot, and farmers are entirely occupied in gathering their wheat, which has been slightly damaged by the wet weather. All the furnaces in the immediate district are running but two, and we note the following sales of 2,000 tons in the past three days at the following figures: To Detroit, silver gray, \$14.50; Evansville, No. 2 foundry, \$14.50; St. Louis, No. 1 mill, \$13.50; Cleveland, No. 1 foundry, \$16;—all for cash on cars at furnace. Offers have been made for several thousand tons if prices would be conceded, but were declined. These figures may be taken as the ruling prices obtained by our furnaces, although we learn of the sale of several hundred tons of off-grades at lower prices. For retail lots of pig and heavy goods we make no change, but quote same as last:

No. 1 Foundry.....	\$17 00 @ 18 00
No. 2 Foundry.....	16 00 @ 16 50
Gray Forge.....	14 00 @ 15 00
Car-Wheel Metal.....	22 00 @ 24 00
Nails, car-load lots.....	2 25 @ —
Bar Iron.....	1 70 @ —
Old Iron.....	nominal.
Wrought Scrap, No. 1.....	14 00 @ —
" No. 2.....	11 00 @ —
Cotton Tie (Lippings).....	10 00 @ —
Spikes (Railroad).....	2 35 @ —
Light Rails.....	2 00 @ —
Barbed wire—galvanized.....	6 @ —
Barb wire—Cambria Ink.....	6 @ —

St. Louis Iron Market.

Specially reported by HOFFER & Co., Pig Iron and Iron Ore, No. 318 Olive Street.

ST. LOUIS, July 7, 1884.

About all the business in pig iron doing here is hand-to-mouth business. The market is in such condition as to be almost impossible to quote. We therefore continue former quotations, which must be considered nominal. We quote:

HOT-BLAST CHARCOAL.	
Missouri.....	\$19 00 @ 20 00
Southern.....	30 00 @ 32 00
Ohio.....	24 00 @ 26 00
COKE AND COAL.	
Missouri.....	19 00 @ 20 00
Southern.....	18 50 @ 19 50
Ohio.....	21 00 @ 25 00
MILL IRONS.	
Red Short.....	17 00 @ 17 50
Neutral.....	16 00 @ 17 00
CAR-WHEEL AND MALLEABLE IRON.	
Missouri.....	19 00 @ 20 00
Southern.....	25 00 @ 26 00
Ohio.....	23 00 @ 23 00
Iron, pig.	

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MANUFACTURING.

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The success of the Maryland Whitewash Co. has been very satisfactory. Since the beginning of the manufacture of this article the demand has increased to such an extent as to compel them to enlarge their quarters, and they have taken the large three-story building adjoining the one formerly occupied. A fine business has been built up on the real merit of the article manufactured. The orders received have been from all parts of the South, and the local trade is on the increase.

MESSRS. L. P. CLARK & SONS, manufacturers of hydrants and closets, report their business as on the increase. The large amount of building going on has given them a boom.

MR. WM. R. EMERSON, general agent of the Birdsall Co., has received, during the past week, a large number of orders for engines, saw mills and threshers separately, and also for complete outfits. The farmers are sending in favorable testimonials, and all say the Birdsall is undoubtedly the best. The traction engine, which has attracted so much attention from the first, is building up a large and profitable trade on its own workmanship, durability, and capability of doing what is guaranteed for it. In the States where Mr. Emerson operates, the machinery he has sold has given such entire satisfaction as to insure other sales.

MR. F. H. FOLSOM, millwright and mechanical engineer, has removed from No. 18 East Falls avenue to the large warehouse No. 48 S. Frederick street. Owing to an increase in his business he was compelled to secure more room, and he announces that he is now prepared to contract for all classes of new and repair work, such as the constructing of new mills, additions to old ones, &c., &c. His business has been very good during the past two months, and is still on the increase.

MR. JOHN B. ADT, machinist, N. Holliday street, is making two granulators and hoisting apparatus for firms in North Carolina. He has a large amount of miscellaneous repair work on hand.

MESSRS. JACKSON & TYLER have just taken the agency for the well-known Worthington Steam Pump, which is being used for all purposes, such as feeding boilers, house supply, etc. It has given satisfaction wherever used. Every pump, whether new or after being repaired, is fully tested under various conditions of speed and pressure before being delivered from the manufactory. Any further information, as to cost, &c., will be cheerfully given by the above firm.

MESSRS. DUFUR & Co., manufacturers of wire railing, Howard street, have their order book well filled with orders for this city and the South. They have built up an extensive business in the South. During the past six months they have been pushed to complete the orders for present and future delivery.

HARDWARE.

The hardware market is moderately active, with buyers showing more disposition to take hold. In prices there have been no changes of importance. The outlook is considered favorable for a good healthy fall trade, though great activity and high prices are not looked for.

The demand for nails is light, with prices nominally at \$2.35.



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For the purpose of making the *MANUFACTURERS' RECORD* a still more valuable medium of communication between its readers North and South, we will publish, **FREE OF CHARGE**, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the *Baltimore Manufacturers' Record*.

COTTON MACHINERY, now running in first-class order, for sale on easy terms, or might take part payment in stock. A rare chance for a new mill, or others wishing to increase their machinery, to secure a bargain. Particulars furnished by A. B. Pitkin, Manufacturers' Agency, Providence, R. I.

FLOUR MILL FOR SALE.—Steam flouring mill; three run of stones. Machinery in first class condition. Best run of custom of any mill in this section. Everything favorable to large and profitable business. Satisfactory reason for selling. For particulars address Harrison & Sons, Kenton, Tenn.

FOR SALE.—To close an estate, two cotton factories, known as "Beaver Creek and Bluff Mills," in Fayetteville, North Carolina, at public auction, Tuesday, July 8th. Products: yarns and sheetings. Capacity per day 7,000 yards sheetings and 40 bales yarn. Business prosperous. Address Beaver Creek and Bluff Mills, Fayetteville, N. C.

A ONE SET WOOLEN MILL FOR SALE.—CHEAP. Located four miles south of Jonesboro, Washington county, Tenn.; runs by water, about thirty-horse power; good two-story house, 40x80 feet, and a full set of machinery; only been run two years. Also another water-power on the same stream, with buildings, &c. As much land with each water-power as parties would want. Will sell for cash or exchange for farming land. Will give some time, on part payment. For further particulars address Henry Miller & Son, Carher's Mill, Tenn.

FOR SALE.—A cotton mill situated on the line of the Illinois Central Railroad, near the city of Canton, Miss., in a splendid cotton region, good water supply, cheap fuel, labor abundant. The factory would be equally well adapted to ginning on a large scale, by improved methods, and cottonseed-oil mill combined. The property consists of 28½ acres land, lying along the railroad; factory building 100 yards from the rail road, in the centre of the tract, substantially built brick, 300x190 feet; contains one English engine, 200-horse, two English lappers, shafting and pulleys. There is a double dwelling-house on the property. Bigsby & Edmonds, Baltimore, Md.

SOUTHERN COTTON MILL FOR SALE.—One of the best-known and best-paying mills in the South, running 8,161 spindles. Will be sold, to enable division of the property among heirs. Includes 100 acres of land, and river falls, water-power of 6,000-horse power, and can be cheaply increased to 18,000 or 20,000-horse power. Sites on the property for other factories. \$100,000 to \$200,000 worth of new machinery put in in last four years. Mill now in very prosperous condition. A stratum of granite runs through the place, affording an almost inexhaustible supply, as good as any in the country for building purposes. Pure water. Climate healthful and salubrious. Maps, plans, specifications, inventory, and all desired information furnished on application. Address BIGSBY & EDMONDS, Publishers *MANUFACTURERS' RECORD*, Baltimore.

A PRACTICAL cotton manufacturer of New England, with an experience of 25 years as lessee and manager, wishes to negotiate for management of a Southern cotton mill. Will buy some of the stock, if satisfactory. Can furnish letters from some of the best men in the business. Address E. B., care *MANUFACTURERS' RECORD*.

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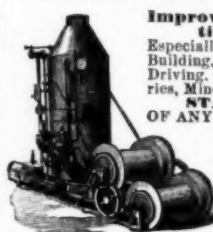
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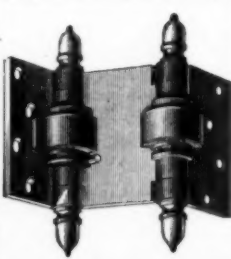
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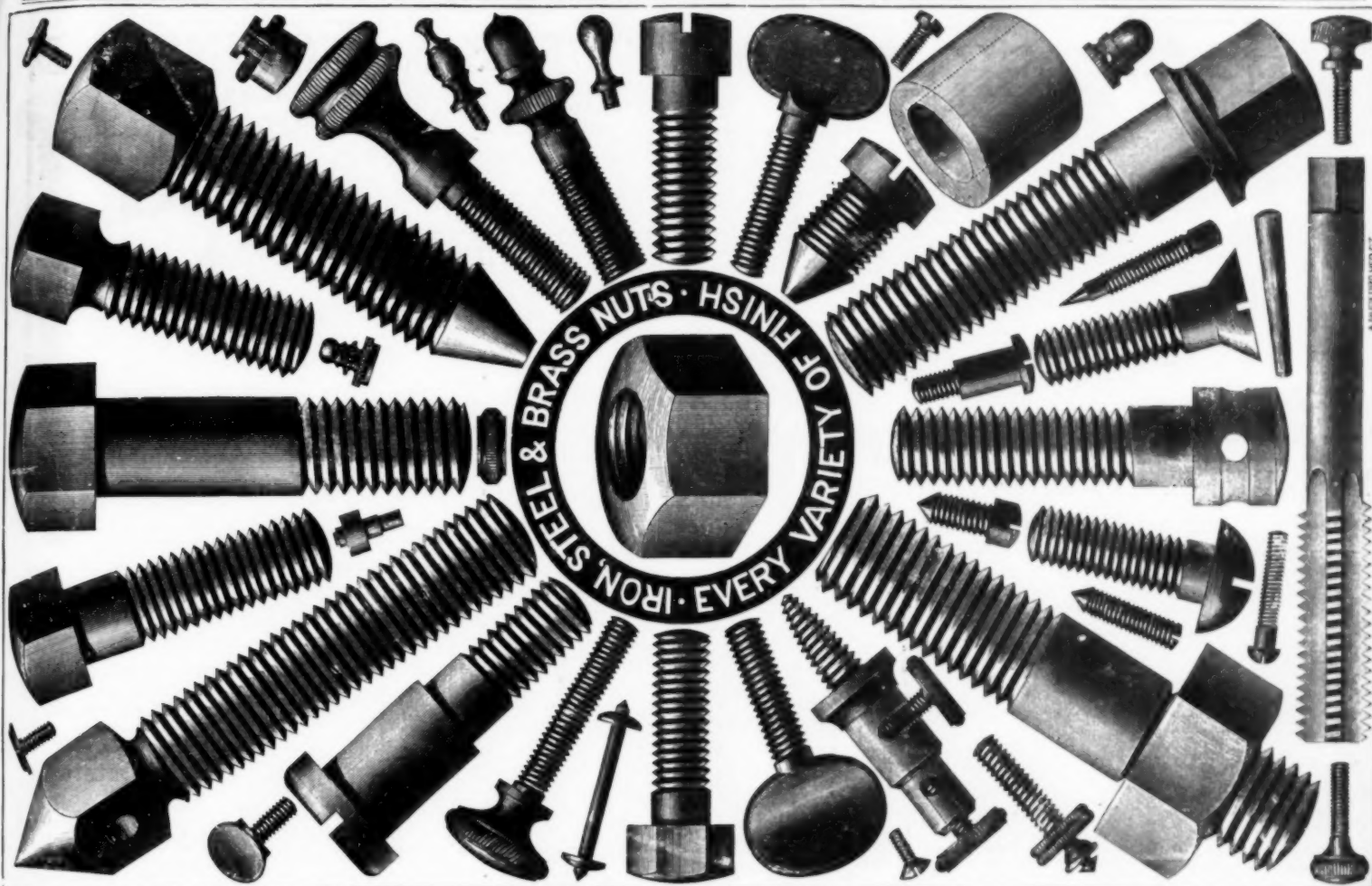
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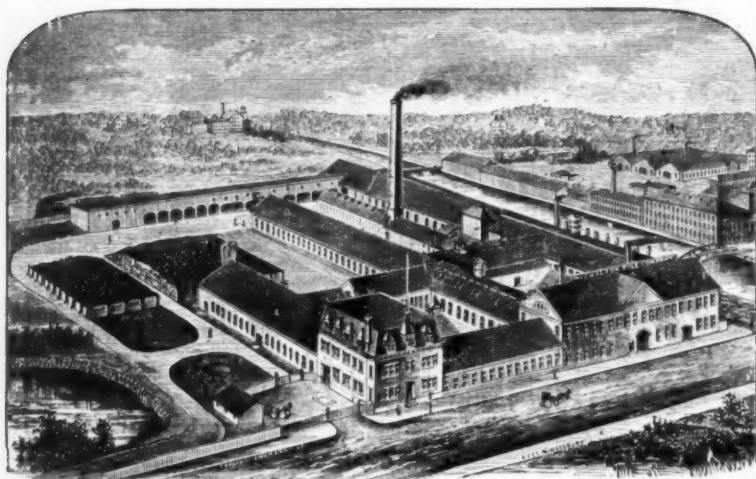
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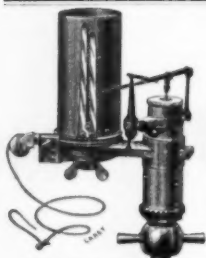
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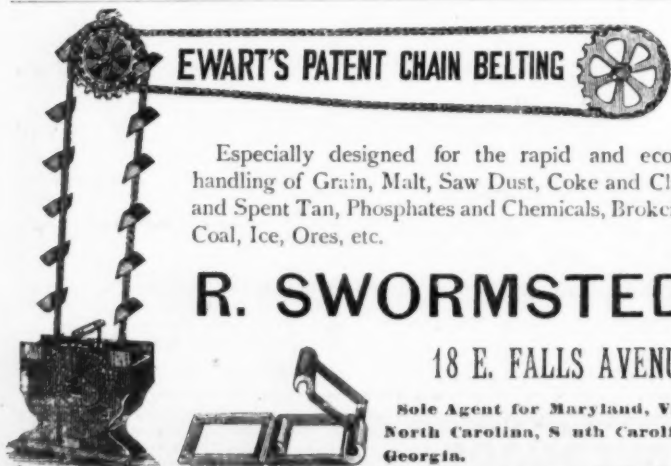
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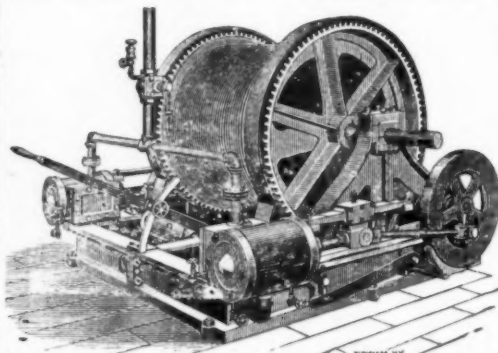
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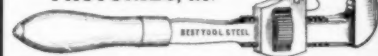
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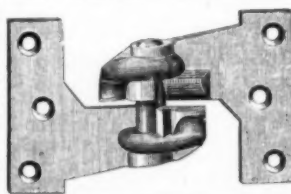
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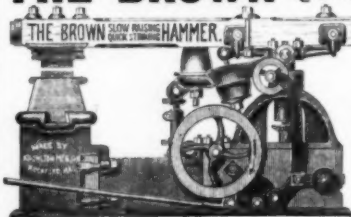
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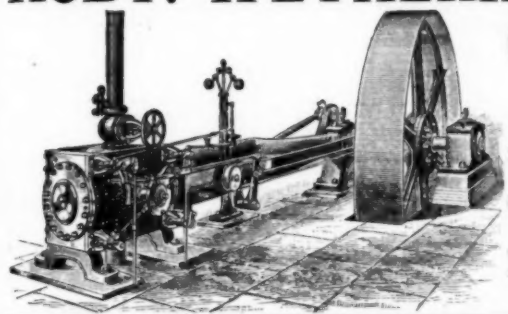
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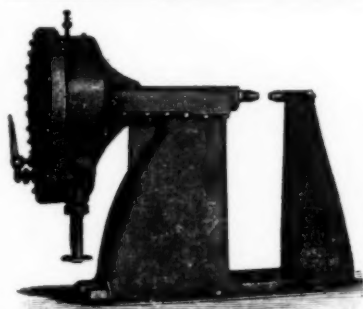
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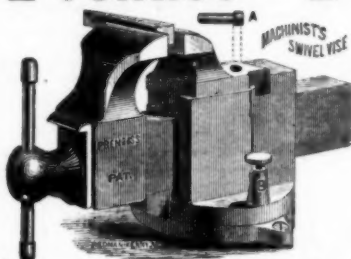
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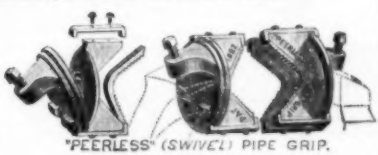
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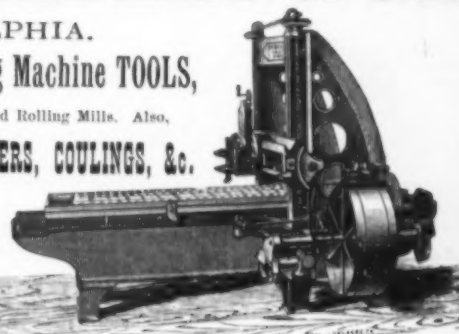
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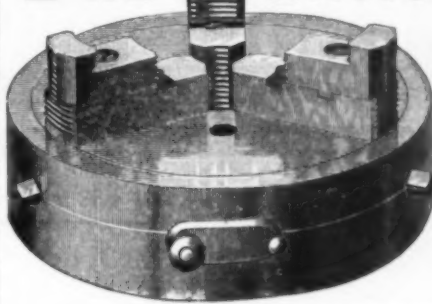
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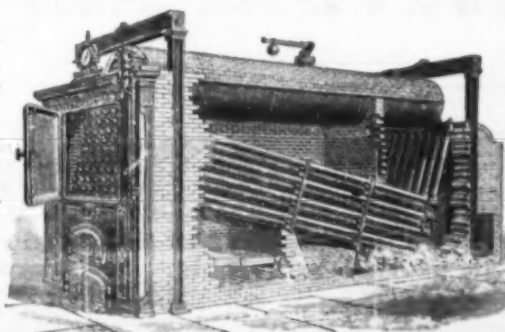
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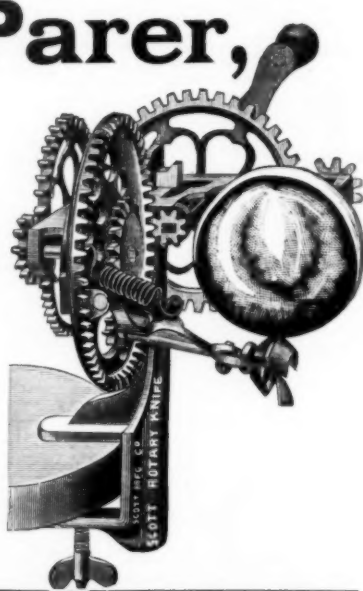
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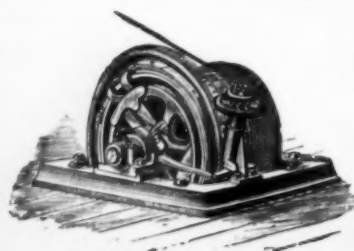
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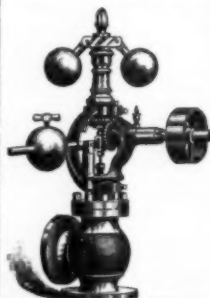
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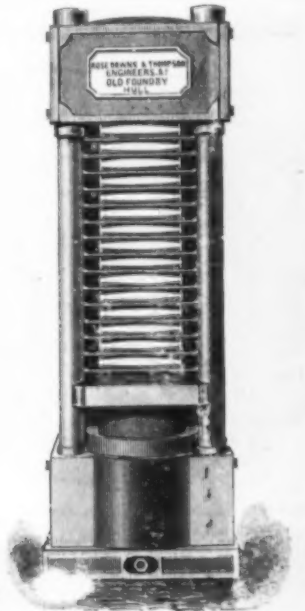
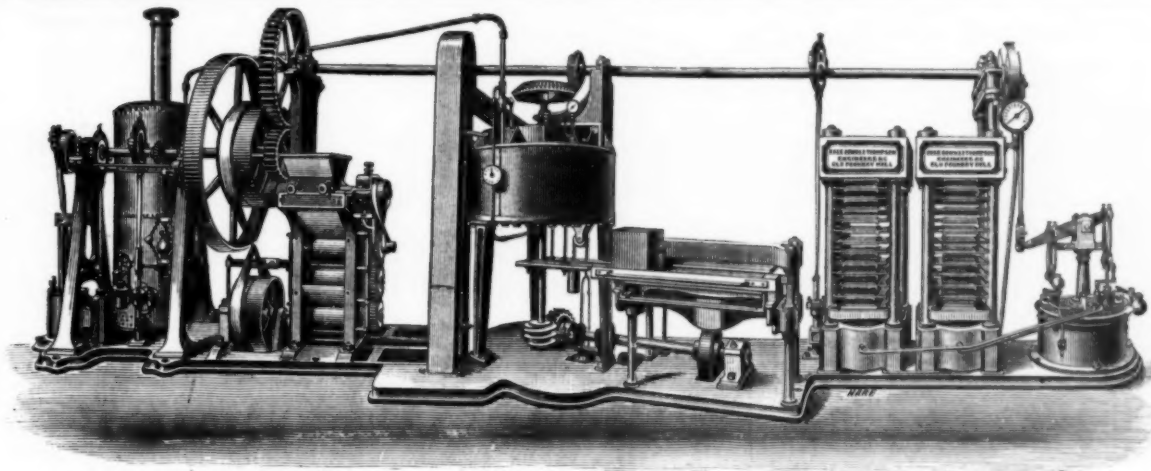
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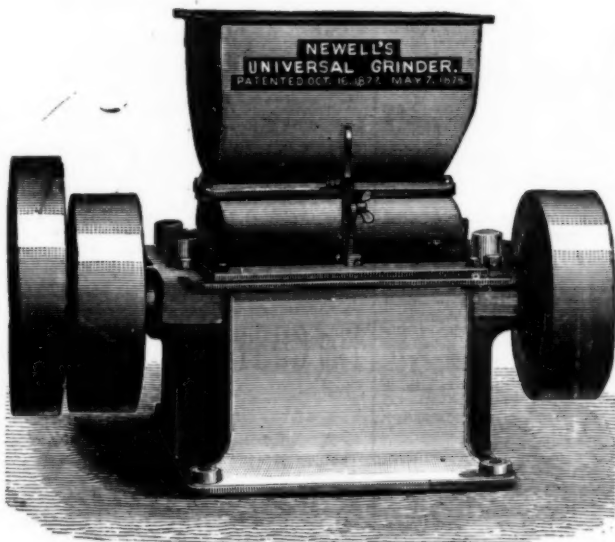


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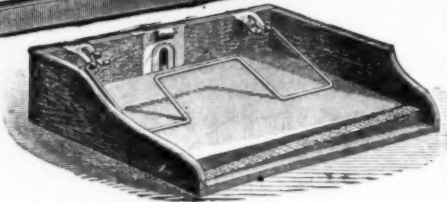
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The small cut shows one of the Files or Drawers of a Cabinet. The index in each File has 26 divisions, giving as many spaces or compartments for separating the papers, thereby assuring quick access to any letter when wanted.



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These Cabinet Letter Files are made in many sizes, ranging from the smallest of six Files to those of one hundred or more. As lately improved, they combine all the desirable points wanted in a complete Letter File; are elegantly and substantially made, the wood-work being of the best seasoned Black Walnut, veneered, with fittings of brass and steel, nickel-plated. They can be arranged for any class of correspondence, and adapted to any requirement.

Illustrated Catalogue on application to

CAMERON, AMBERG, & CO., Sole Manufacturers,

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Saranac Horse Nail Co.

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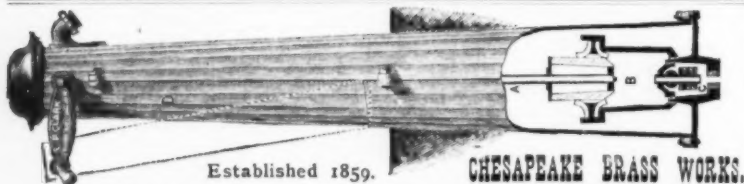
W. S. GUIBORD, Sec'y.

The cuts illustrating this advertisement are of Nails twisted and bent when cold.

—AGENTS:—

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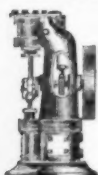
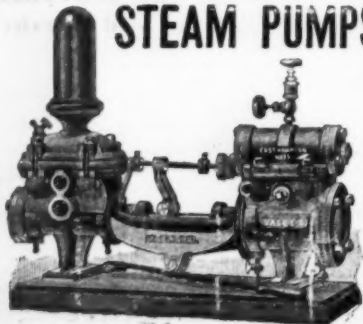


Established 1859.

CHESAPEAKE BRASS WORKS.

L. P. CLARK & SONS, 34 N. Holliday St., BALTIMORE.

STEAM PUMPS FOR EVERY DUTY.

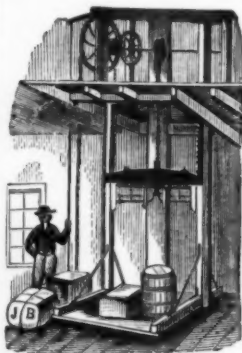


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Boiler Feed
PUMPS
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Acme. Bucket Plunger.

VALLEY MACHINE CO.,
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New and Second-Hand Machinery

NEW.

- 1 Engine Lathe, 10 in. x 3 1/2 ft.
- 1 each Engine Lathes, 11 in. x 4 and 5 ft.
- 1 " " 13 in. x 5, 6 and 8 ft.
- 1 Engine Lathe, 14 in. x 5, 6 and 8 ft.
- 1 " " 16 in. x 6 ft.
- 1 each, Engine Lathes, 16 in. x 6, 7, 8 and 10 ft.
- 1 " " 20 in. x 8, 10, 12, 14 and 16 ft.
- 1 " " 22 in. x 8, 10, 12, 14 and 16 ft.
- 1 " " 24 in., any length of bed to 35 ft.
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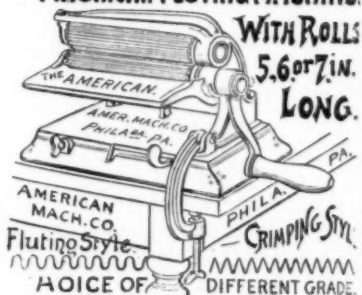
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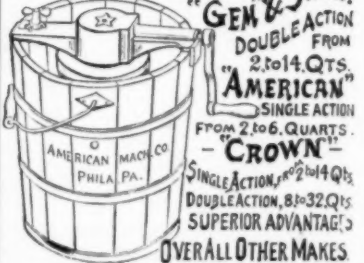
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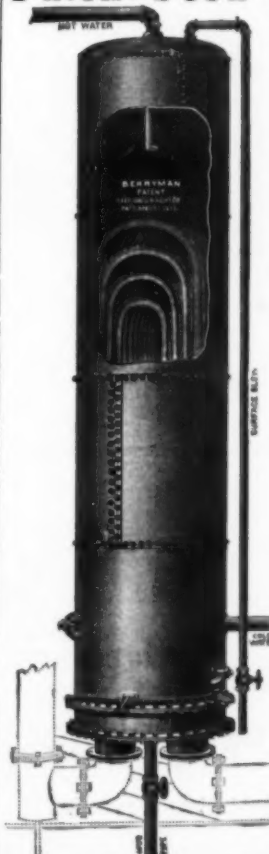
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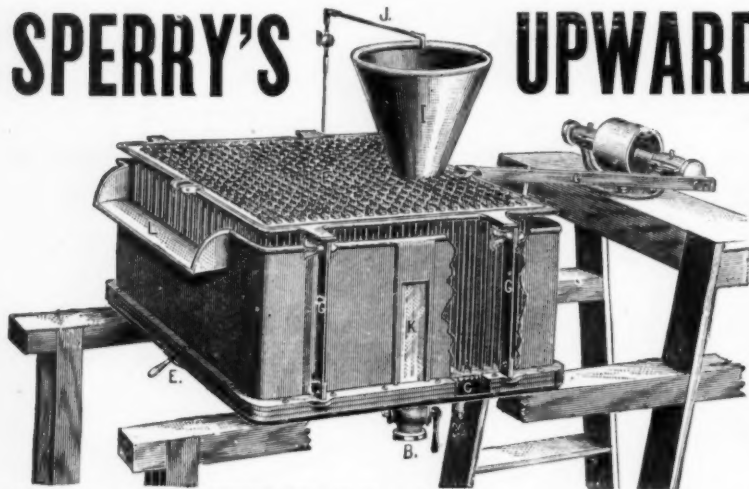
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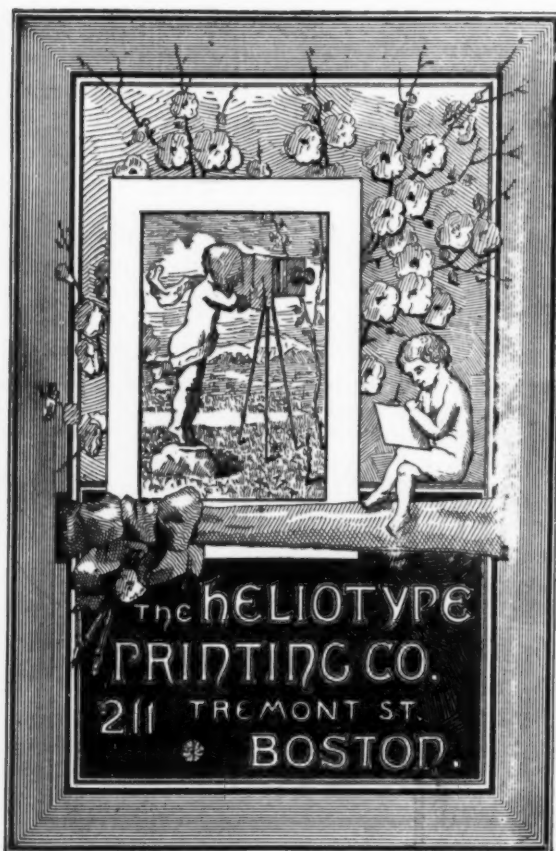
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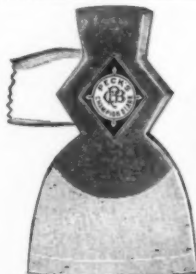
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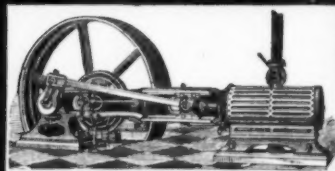
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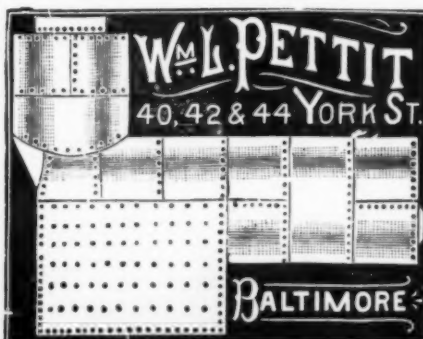
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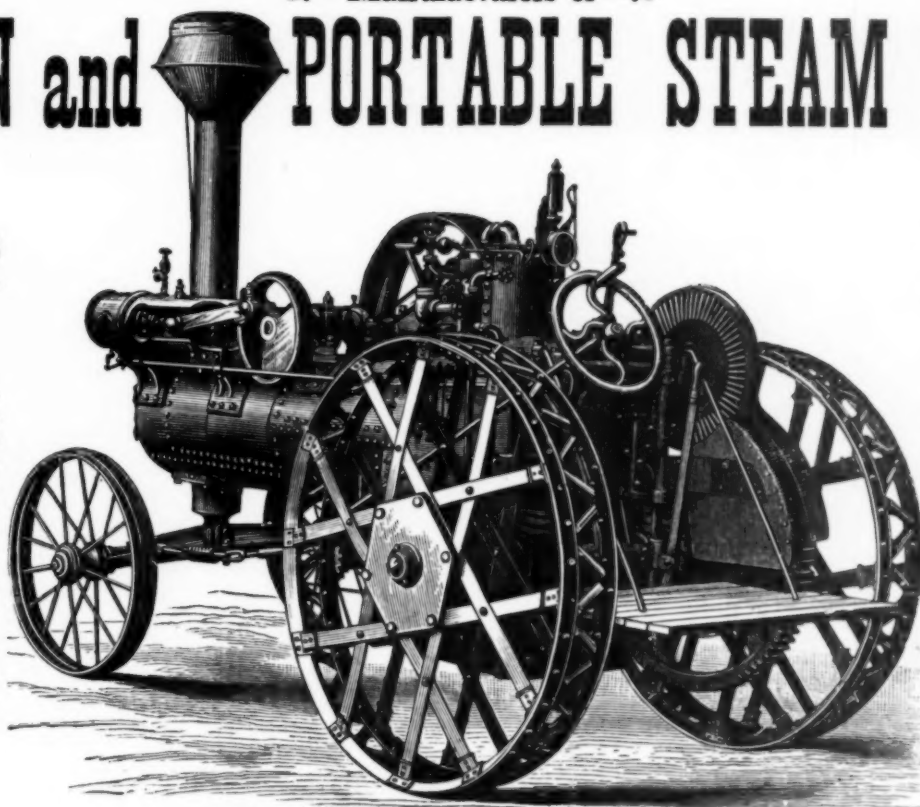
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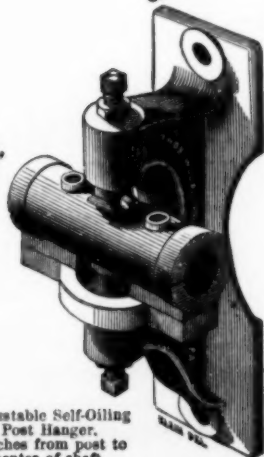
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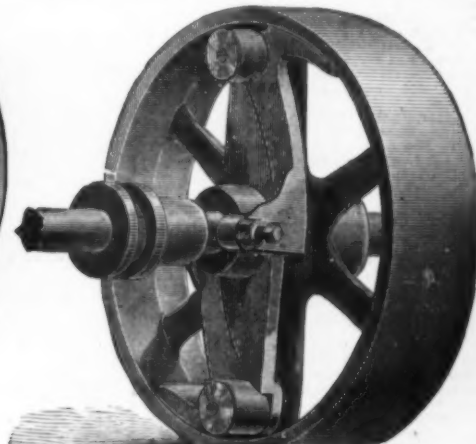
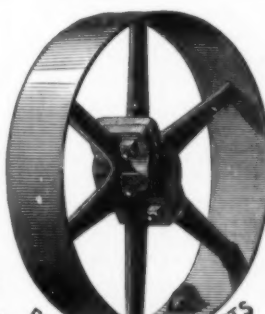
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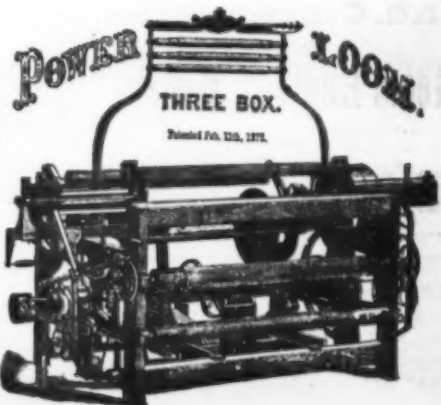
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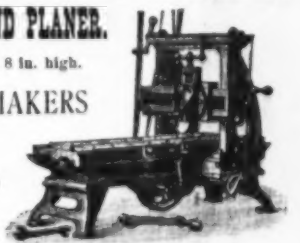
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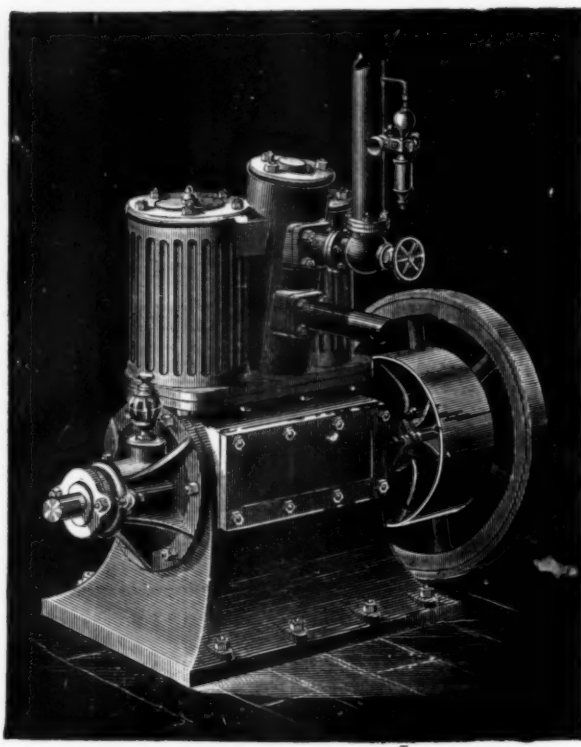
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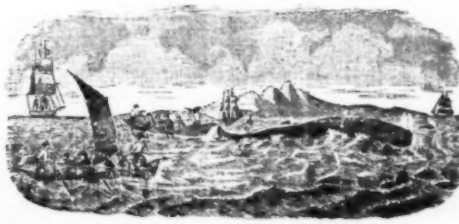
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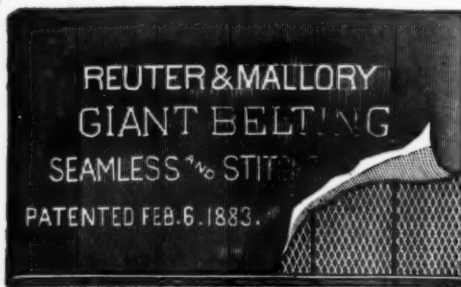
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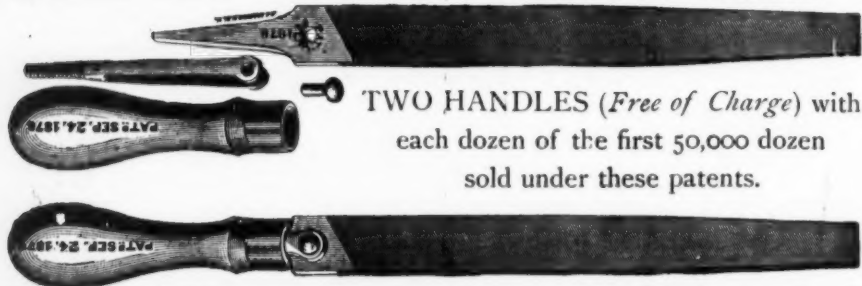
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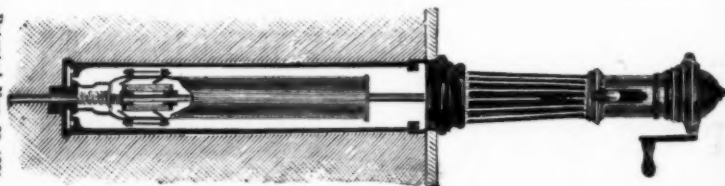
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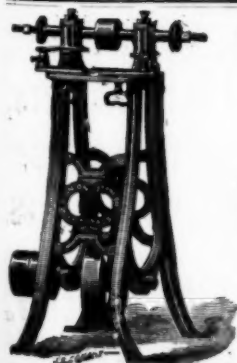
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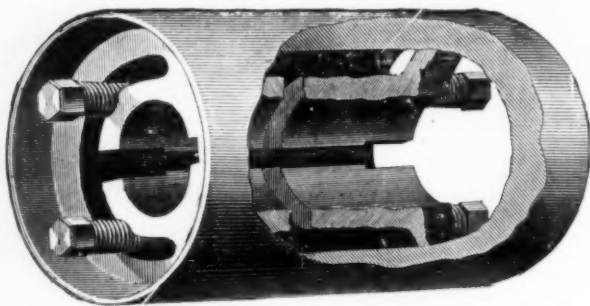
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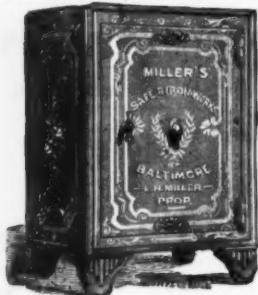


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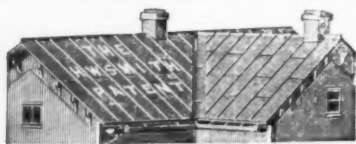
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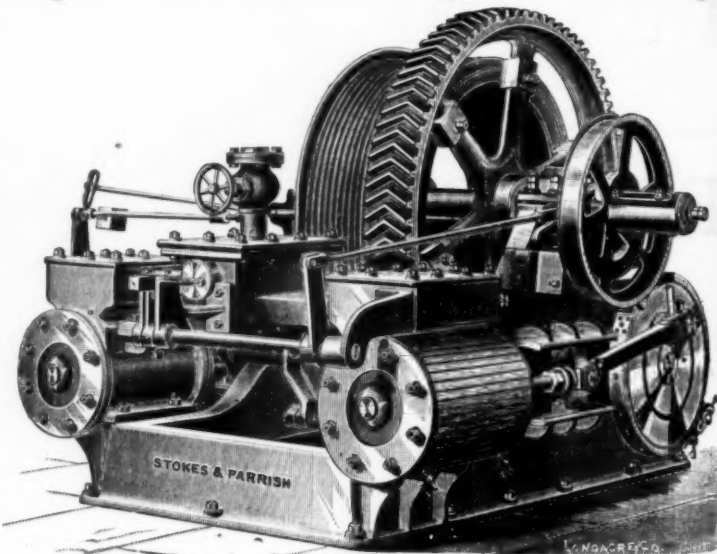
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